

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for scanning a record carrier
(4) having a track (11) for recording information represented by marks (8), the device comprising:
a scanning unit (22) comprising a radiation source and optical elements for generating a beam of radiation from the radiation source via a scanning spot on the track to a detector for detecting at least one read signal, the scanning unit further comprising means for generating an asymmetry signal β based on a read signal from the detector when scanning a part of the track comprising marks, the asymmetry signal β being a measure of correspondence of the marks to desired lengths thereof,
a sensor (33) for detecting a sense signal (32) from the beam (24), and

a control unit for controlling ~~the~~ radiation source power of
the radiation source to a desired value in dependence on the sense
signal, and

~~characterized in that~~

~~the device comprises~~ correction means (31) for generating a
correction signal (34) indicative of local optical properties of
the record carrier in dependence on at least one sense signal
measured on at least one part of the track near the scanning spot
(23), and for correcting at least one of said detected signals in
dependence on the correction signal,

wherein the correction means are coupled to the control unit
for correcting the desired value of the radiation source power, and

wherein the asymmetry signal β is generated by:

measuring a positive peak level A1 and a negative peak
level A2 relative to a DC level of the read signal,

correcting the positive peak level A1 of the read signal
to A1' by a first correction calculation in dependence on the
correction signal,

correcting the negative peak level A2 of the read signal
to A2' by a second correction calculation independence on the

correction signal, and

calculating the asymmetry signal β as $\beta = (A1' + A2') /$
 $(A1' - A2')$.

2. (Currently Amended) A-The device as claimed in claim 1,
wherein the correction means comprise means ~~(20)~~ for selecting said
part of the track such that the measured sense signal has a
component indicative of the local birefringence or de-polarizing
effects of the record carrier as local optical properties.

3. (Currently Amended) A-The device as claimed in claim 1,
wherein the correction means comprise means for generating an empty
value FSE by detecting the sense signal when reading a part of the
track having no marks, and a written value FSW by detecting the
sense signal when reading a part of the track having marks, and
means for combining the empty value and the written value in order
to generate the correction signal.

Claim 4-6 (Canceled)

7. (Currently Amended) A The device as claimed in ~~claim 6~~
claim 1, wherein the measuring means comprise means for generating
an empty value FSE by detecting the sense signal when reading a
part of the track having no marks, and a written value FSW by
detecting the sense signal when reading a part of the track having
marks, and

$$A1' = A1 * (1 + ((FSW - FSE) / FSW)), \text{ and}$$

$$A2' = A2 * (1 + ((FSW - FSE) / FSW) \times A2 / A1)$$

8. (Currently Amended) A The device as claimed in claim 1,
wherein the sensor is a forward sense diode for detecting radiation
from a part of the beam as reflected from the record carrier.

9. (Currently Amended) A method of generating signals from a
detector during the scanning of a track on a record carrier via a
beam of radiation from a radiation source via a scanning spot on
the track to the detector, the track being for recording
information represented by marks, the method comprising the acts
of:

detecting a sense signal from the beam via a sensor, and

controlling the a radiation source power of the radiation
source to a desired value in dependence on the sense signal,
characterized in that the method comprises

generating an asymmetry signal β based on a read signal when
scanning a part of the track comprising marks, the asymmetry signal
 β being a measure of correspondence of the marks to desired lengths
thereof,

generating a correction signal using the asymmetry signal β
and indicative of local optical properties of the record carrier in
dependence on at least one sense signal measured on at least one
part of the track near the scanning spot, and

correcting at least one of said detected signals in dependence
on the correction signal,

wherein the asymmetry signal β is generated by the acts of:
measuring a positive peak level A1 and a negative peak level
A2 relative to a DC level of the read signal,

correcting the positive peak level A1 of the read signal to
A1' by a first correction calculation in dependence on the
correction signal,

correcting the negative peak level A2 of the read signal to

A2' by a second correction calculation independence on the
correction signal, and

calculating the asymmetry signal β as $\beta = (A1' + A2') / (A1' -$
A2').

10. (Currently Amended) A method of controlling the power of a radiation source, ~~in particular a laser,~~ during the recording of information represented by marks in a track on a record carrier via a beam of radiation from the radiation source via a scanning spot on the track to a detector, the method comprising the acts of:

detecting a sense signal from the beam via a sensor, and
generating an asymmetry signal β based on a read signal when
scanning a part of the track comprising marks, the asymmetry signal
 β being a measure of correspondence of the marks to desired lengths
thereof,

controlling the laser power of the radiation source to a
desired value in dependence on the sense signal, ~~characterized in
that the method comprises~~

correcting the desired value in dependence on a correction
signal related to the asymmetry signal β and indicative of local

optical properties of the record carrier in dependence on at least one sense signal measured on at least one part of the track near the scanning spot,

wherein the asymmetry signal β is generated by the acts of:
measuring a positive peak level A1 and a negative peak level
A2 relative to a DC level of the read signal,
correcting the positive peak level A1 of the read signal to
A1' by a first correction calculation in dependence on the
correction signal,
correcting the negative peak level A2 of the read signal to
A2' by a second correction calculation independence on the
correction signal, and
calculating the asymmetry signal β as $\beta = (A1' + A2') / (A1' -$
A2').

Claim 11 (Canceled)